

**NORTH CAROLINA DIVISION OF
AIR QUALITY**

Application Review

Issue Date: March ##, 2020

Region: Winston-Salem Regional Office
County: Wilkes
NC Facility ID: 9700175
Inspector's Name: Robert Barker
Date of Last Inspection: 12/11/2019
Compliance Code: 3 / Compliance - inspection

<p align="center">Facility Data</p> <p>Applicant (Facility's Name): JELD-WEN, Inc. - North Wilkesboro</p> <p>Facility Address: JELD-WEN, Inc. - North Wilkesboro 205 Lanes Drive North Wilkesboro, NC 28659</p> <p>SIC: 3083 / Laminated Plastics Plate And Sheet NAICS: 32613 / Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing</p> <p>Facility Classification: Before: Title V After: Title V Fee Classification: Before: Title V After: Title V</p>			<p align="center">Permit Applicability (this application only)</p> <p>SIP: 15A NCAC 2Q .0513 (renewal) NSPS: NA NESHAP: NA PSD: NA PSD Avoidance: NA NC Toxics: NA 112(r): NA Other: NA</p>																																																				
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<p>Review Engineer: Richard Simpson</p> <p>Review Engineer's Signature: _____ Date: March ##, 2020</p>					<p align="center">Comments / Recommendations:</p> <p>Issue: 10247/T06 Permit Issue Date: March ##, 2020 Permit Expiration Date: February 28, 2025</p>																																																		

I. Introduction:

JELD-WEN, Incorporated currently holds Title V Permit No. 10247T05 with an expiration date of May 30, 2020 for a door manufacturing facility in North Wilkesboro, Wilkes County, North Carolina. The primary purpose of this application is for permit renewal. The renewal application 9700175.19A was received on September 11, 2019, which was at least nine months prior to the expiration date, as required by General Permit Condition 3.K. The application was considered complete on that date. Therefore, the existing permit shall not expire until the renewal permit has been issued or denied. All terms and conditions of the existing permit shall remain in effect until the renewal permit has been issued or denied.

II. Facility Description

JELD-WEN manufactures fiberglass door skins that are shipped to a sister JELD-WEN facility in Lexington, NC. The process starts at the sheet molding compound (SMC) door skin area. Two skins with wood and steel frame components are assembled into a hollow door using the hot melt glue where methylene diphenyl diisocyanate (MDI, a HAP) is released as fugitive emissions. The assembled door is placed into a press to cure the glue bonds and provide structural support during filling. The door is filled with a polyurethane foam to provide structural rigidity and thermal insulation, which releases MDI (RapidEx the solid hot melt adhesive used contains 5% of MDI by weight). This product is applied to the door by robots in the form of beads. The doors are retained in the press until the glue and foam are cured. Cured doors are trimmed to final dimensions in the door trim saw, with the trimmed material being routed via air conveyor to a fabric filter. Finished doors are then prepared for shipment. Hours of operation for this facility are 24 hours per day, 7 days per week, for 52 weeks per year.

III. History/Background/Application Chronology

May 17, 2018 – Air Permit T05 was issued.

December 6, 2019 – Facility representative Aaron Brite and permit engineer Richard Simpson began preliminary permit renewal discussions.

December 11, 2019 - The facility was inspected by Robert Barker and Matt Harper from the Winston-Salem Regional Office. At the time of the inspection, the facility appeared to operate in compliance with all applicable regulations and permit conditions.

January 15 - ##, 2020 – The facility, Winston-Salem Regional Office, and Stationary Compliance Section were requested by the Permitting Section to comment on the renewal. Comments were received and included in the permit from DAQ.

January ##, 2020 – TVEE changes were approved by Ms. Jenny Sheppard TVEE Coordinator.

January ##, 2020 – DRAFT permit sent to public notice and EPA for review prior to issuance. The 30-day public comment period ended **February ##, 2020** with the receipt of no comments. The 45-day EPA review period ended **March ##, 2020** with the receipt of no comments.

March ##, 2020 – Permit 10247T06 was signed and issued.

IV. Permit Modifications/Changes and ESM Discussion

The following table lists all changes made from previous permit 10247T05:

Page(s)	Section	Description of Change(s)
Cover and throughout	Throughout	Updated all tables, dates, and permit revision numbers.
3	Section 1	Removed footnotes from previous permit modifications since they have been implemented.
6	Section 2.1 B.1.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0515: Particulates from Fuel Miscellaneous Industrial Processes.
7	Section 2.1 B2.	Updated language with the DAQ shell Title V permit conditions for 15A 02D .0521: Control of Visible Emissions.
9-18	General Conditions	The General Conditions were updated to the latest version of DAQ shell version 5.3 dated 08/12/2018.

There were changes made to the Title V Equipment Editor (TVEE) under this permit renewal.

V. Regulatory Review/Equipment Changes

The facility is currently subject to the following regulations:

- 15A NCAC 02D .0515, "Particulates from Miscellaneous Industrial Processes"
- 15A NCAC 02D .0521, "Control of Visible Emissions"
- 15A NCAC 02D .1111, "Maximum Achievable Control Technology (40 CFR 63, Subpart WWW)"
- 15A NCAC 02D .1806, "Control and Prohibition of Odorous Emissions"

An extensive review for each applicable regulation is not included in this document. For a discussion of MACT, CAM, and PSD requirements, see Section 6. The permit will be updated to reflect the most current stipulations for all applicable regulations. Detail changes are noted in the above Table of Changes.

VI. NSPS, NESHAPS/MACT, PSD, 112(r), CAM, BART

NSPS

The Permittee is not currently subject to any New Source Performance Standards. This permit renewal does not affect this status.

NESHAPS/MACT

JELD-WEN is subject Environmental Management Commission Standard 15A NCAC 02D .1111, "Maximum Achievable Control Technology" as promulgated in 40 CFR Part 63 Subpart WWW, "National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production," including Subpart A "General Provisions." The facility is considered a new source under this subpart because it was constructed after August 2, 2001. Since the facility is considered a major source, the facility sources are subject to MACT 4W upon start-up.

Although SMC is used at the facility, the door skin manufacturing process is considered a closed molding operation using compression molding under MACT 4W. Further, because the facility emits less than 100 tpy of HAPs from its SMC manufacturing process, the facility does not have to comply with HAP emission limits but only has to meet the work practice standards in Table 4 as specified in §63.5805, when applicable. The table below summarizes the work practice standards for JELD-WEN.

Table 4. MACT WWWW Requirements	
Process	Work Practice Standard
New closed molding operation using compression/injection molding	The Permittee shall uncover, unwrap or expose only one charge per mold cycle per compression molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.

JELD-WEN is also required to meet recordkeeping and reporting requirements under MACT 4W. The initial notification requirements under 40 CFR 63 Subpart WWWW are met by the permit application, per 40 CFR 63.9(b)(1)(iii). As specified in Table 13 to 40 CFR 63 Subpart WWWW, no Notice of Compliance Status is required for facilities that are only required to comply with work practice standards. Continued compliance is expected. This permit renewal does not affect this status.

Facility's Surface Coating of Wood components, if needed, consumes less than 500 gallons per year of coating. The facility consumption is less than the 1,110 gallon applicability limit for 40 CFR Subpart QQQQ, "National Emissions Standards for Hazardous Air Pollutants: Surface Coating of Wood Building Products."

NSR/PSD

Wilkes County is in attainment for ozone. The facility is currently a minor source under Prevention of Significant Deterioration (PSD). This renewal does not alter the facility's PSD status.

112(r) – The facility is not subject to Section 112(r) because it does not store any of the regulated substances in quantities above the applicable thresholds. This permit renewal does not affect the status with respect to 112(r).

CAM - 40 CFR 64 requires that a compliance assurance monitoring plan be developed for all equipment located at a major facility, that have pre-controlled emissions above the major source threshold, and use a control device to meet an applicable standard. CAM is not applicable for this facility.

VII. Facility Wide Air Toxics (State Enforceable Only)

All sources of TAPs are subject to MACT WWWW and hence exempt from toxics permitting. During the issuance of permit no. T01, an unacceptable risk review was conducted assuming 12.7 lb/hr (56 tpy) of styrene. The Permittee estimates potential emissions of styrene at 46 tpy with this application. Thus, the original conclusion of no unacceptable risk appears to still be valid. No further review is necessary

VIII. Facility Emissions Review

The actual emissions from the annual reporting inventories are listed in the first page of this review.

IX. Compliance Status

On March December 11, 2019, Robert Barker and Matt Harper of the WSRO office conducted a full compliance evaluation of the facility. The conclusion from his inspection noted; “Based on review of the records and visual observations, the facility appeared to be operating in compliance with Air Quality standards and regulations at the time of this inspection.”

Per the WSRO inspection report and permitting documents, the facility submitted a 502(b)(10) change on July 31, 2017 for the purpose of adding a kerf machining process to the existing door CNC trim lines (ES-DT-1 and ES-DT-2). Per August 11, 2017 Permit Applicability Determination email (#3096), the equipment would not change the existing process rate and will not require any change to the existing permit conditions. NCDAQ determined that no changes to the permit were required.

Five year compliance history

The facility has not been sent any Notice of Violations and Deficiency in the last five years.

X. Public Notice/EPA and Affected State(s) Review

A thirty-day public notice period and a forty-five-day EPA review period is required for this renewal of the Title V permit. A notice of the DRAFT Title V Permit shall be made pursuant to 15A NCAC 02Q .0521. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice shall be sent to persons on the Title V mailing list and EPA. Pursuant to 15A NCAC 02Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant shall be provided to the EPA. Also pursuant to 02Q .0522, a notice of the DRAFT Title V Permit shall be provided to each affected State at or before the time notice is provided to the public under 02Q .0521 above

EPA’s 45 Day Review period

Kelly Fortin (U.S. EPA, Region IV) was provided a PROPOSED permit for review on January ##, 2020. EPA 45-day review period ended on March ##, 2020. No comments were offered or received.

Public Notice

The 30-day public notice of the PROPOSED permit was posted on the NCDAQ website on January ##, 2020. No comments were offered or received.

XI. Other Regulatory Considerations

- A P.E. seal was not required for the permit renewal.
- A consistency determination was not required for the permit renewal.
- An application fee was not required for the permit renewal.
- Wilkes County has triggered increment tracking under PSD for PM₁₀ and SO₂. However, this permit renewal does not consume or expand increments for any pollutants.

XII. Recommendations

The permit renewal application for JELD-WEN Incorporated, Wilkes County, North Carolina has been reviewed by DAQ to determine compliance with all procedures and requirements. The DAQ has determined that this facility is complying or will achieve compliance, as specified in the permit, with all requirements that are applicable to the affected sources. The DAQ recommends the issuance of Air Permit No. 10247T06.